

A Catalogue of the Birds in the Collection of the Bombay Natural History Society—19

Hirundinidae

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[Continued from Vol. 72(2):505]

325 specimens of 27 species and subspecies up to No. 932 in INDIAN HANDBOOK and registered No. 24185 are covered by this part.

EL **Riparia riparia riparia** (Linnaeus)
(Sweden) Collared Sand Martin

1 ♂ *Kurna, Mesopotamia*. Wing 101; bill 5.5; tail 47.

This was collected from migrating flocks on 4th July 1917 and is marked *riparia* by Ticehurst. Except for a shorter (and wider?) bill, I cannot distinguish it from *diluta* (910).

It may be mentioned that Ticehurst in 'The Birds of British Baluchistan' (*JBNHS* 31:869) identified two birds obtained by Meinertzhagen in North Baluchistan as of the nominate race.

910 **Riparia riparia diluta** (Sharpe & Wyatt) (Chimkent, north of Tashkent) Siberian Collared Sand Martin

8: 5 ♂ ♂ 1 ♀ 2 ?

1 *Kashgar, Chinese Turkestan*; 2 Chitral, N.W. F.P.; 1 Jagadhri, Ambala, 1 Tara Devi, 7000', Patiala, Punjab; 1 Khahi, Pithoro, Sind; 2 Nandur-Madhmeshwar, Nasik, Maharashtra.

♀ 18061 Tara Devi, Patiala, with a 97 mm wing is left with *diluta* because of a 45 mm tail.

The specimens from Nandur-Madhmeshwar, Nasik, extend the recorded range of this subspecies (see *JBNHS* 72:853-854).

Measurements loc. cit.

910a **Riparia riparia indica** Ticehurst (Jhelum, Punjab) Indian Collared Sand Martin 3:233

11: 6 ♂ ♂ 5 ♀ ♀

1 Attock, 3 Campbellpur, 2 Rawalpindi, 2 Madhopur, Gurdaspur, Punjab; 1 Okhla, Delhi; 2 Manjhaul, Monghyr District, Bihar.

See note on validity of this subspecies and measurements (loc. cit.).

911 **Riparia riparia ijimae** (Lönnerberg) (*Tretia Padi, Sakhalin*) Eastern Collared Sand Martin 3:234

9: 3 ♂ ♂ 2 ♀ ♀ 4 ♂

2 *Rham, 14700', Tibet*; 1 Nal, Ahmedabad, Gujarat; 1 c. 15 m. off Bassein, 1 Mahim, Bombay; 1 Thana District, Maharashtra; 2 Manjhaul, Monghyr District, Bihar; 1 Kaziranga, Assam.

See note on extension of range of *ijimae* and measurements (loc. cit.).

912 **Riparia paludicola chinensis** (J.E. Gray) (China) Indian Greythroated Sand Martin 3:235

24: 16 ♂ ♂ (1 juv.) 8 ♀ ♀

1 Lahore, 2 Bhajji State, 1 Labru near Ambala, 2* Jagadhri, 1 Chachran, 1 Ambala, 1 Chandigarh; 1 Faraknagar, 2 Delhi; 2 Jajjah Abbasian, Bahawalpur; 2 Vaghjipur, Mehsana, Gujarat; 1 Orissa; 2 Goalpara, 3 Dibrugarh, Assam, 1 *Dalu, Chindwin*; 1 *Myogwin, Henzada, Burma*.

One from Jagadhri, Ambala District, Punjab, and another from Faraknagar near Delhi, were listed under *R. riparia*, of which a specimen was taken on the same day. The former

is a juvenile with a white throat, pale rufous edges to the primary-coverts, and with a wash of the same colour on the back, affecting all the feathers on the rump and forming a distinct pale patch which must be very noticeable in the field.

Measurements on p. 355

IND. HANDBOOK (5:52) refers to its occurrence at Bombay, Nasik and Satara (c. 18°N) in Maharashtra. Barnes in 'Nesting in Western India' (*JBNHS* 4:3) writes "it is common in suitable places in most parts of western India but not from Ratnagiri. Permanent resident breeding, November to March or even later." Bombay then extended as far north as Sind, and I cannot trace any definite record south of Gujarat.

The two females from Dibrugarh, Assam (8092) and Myogwin, Henzada, Burma (8094) have white chins and almost no trace of grey on the breast. They differ from the juvenile in the absence of any rufous above, and can be separated from *R. riparia* by the lack of the tuft of feathers on the leg.

913 *Hirundo rupestris rupestris* Scopoli (Tyrol) Pale Crag Martin 3:236

18: 11♂♂ 3♀♀ (1 juv.) 4o?

1 Marmatai Range, Waziristan; 1 Kilia Drosh, 2 Drosh, 2 Chitral, 1 Kurbu 9000', 1 Khachar, Ladak; 1 Sanjauli, 5 Simla; 1 Patiala; 1 Pandwa, Surat Dangs; 1 Mandhikeri, M.P.; 1 Ambarnath, Thana, Bombay.

Measurements on p. 355

Birds collected earlier than around 1920 are faded and have much paler upperparts than others.

♀ No. 18074 collected at Simla on 31 October 1943 and marked juvenile has pale rufous fringes to the wing quills and the upper tail-coverts.

914 *Hirundo concolor concolor* Sykes (Dukhun) Dusky Crag Martin 3:237

14: 8♂♂ (1 juv.) 3♀♀ 3o?

1* Ambala, Punjab; 2 Bhujia Fort, Kutch; 1 Pandwa, Surat Dangs; 1 Kuno, Gwalior, 2 Chikalda, Berar; 1 Elephanta I., Bombay, 2 South Konkan; 1 Karwar, N. Kanara; 1 Wynaad; 1 Aramboli, S. Travancore; 1 Cumbum Valley, Kurnool District.

♂ No. 18079*, marked "juvenile by skull" is the northernmost available and has the darkest underparts.

Measurements on p. 355

915 *Hirundo obsoleta pallida* (Hume) (Sind) Pale Grey Martin 3:238

4: 2♂♂ 2♀♀

1 Putak, 1 Surbug, Qasrqand, Persian Baluchistan; 1 Tankkaur, 1 Manguli, Jhalawan, Kalat, Baluchistan.

	Wing	Bill	Tail
♂♂	118,121	8.5,8.7	49,49
(IH)	116-125	7-8	49-52)
♀♀	118,119	8.3 (2)	49,49
(IH)	118-123	7-8	49-52)

916 *Hirundo rustica rustica* Linnaeus (Sweden) Western Swallow 3:240

43: 24♂♂ 11♀♀ 8o?

1 Rossiten; 1 Borarka, Dist. Zempelberg, West Prussia (Poland); 3 Kazimain, Baghdad, 2 Basra District, 1 Hawi Plain, Samarra, Mesopotamia; 5 Shiraz, 1 Gulahek, Teheran, 1 Hafr Al Atj, 1 Fao, 7 Charbar, Persian Gulf; 1 Kashgarh, Chinese Turkestan; 1 300 m. off Africa, 18°25'N., 64°30'E.; 2 Mand, Baluchistan; 1 Chitral Drosh; 1 Srinagar, Kashmir; 3 Peshawar N.W.F.P.; 1 Jagadhri, Ambala, 1 Jajjah, Abbasain, Bahawalpur, Punjab; 1 Delhi; 1 Bhavnagar, Gujarat; 1 Nandur-Madhmeshwar, Nasik, 2 Wada, Thana, Maharashtra; 2 Jabbalpur, M.P.; 2 Kanpur, U.P.

While specimens of *H. r. tyleri* (No. 918) are very distinctive, nominate *rustica* and *gutturalis*, both accepted from Indian limits, are difficult to separate. The eastern bird *gutturalis* is said to differ from nominate *rustica* by:

- the pectoral band being broken by the rufous of the chin,
- the slightly smaller size, and
- the purer white underparts.

Ticehurst (*JBNHS* 32:349) dealing with

birds from northwestern India, has referred to the overlap of these characters and identified all of them as nominate *rustica* on the basis of a larger wing—west Europe ♂♂ 124.5-132 mm, ♀♀ 122-126 mm, *contra* NE. Asiatic *gutturalis* ♂♀ 109-120, mostly under 118 mm.

Separating those with wings over 115 as nominate *rustica* and the smaller ones as *gutturalis*, the latter agree more closely in the other characters and are all from the eastern and southern portions of the country. Two specimens of *gutturalis* from Batchian, Wallacea (collected by Wallace in 1859) borrowed from British Museum (Wing ♂ 118, ♀ 108) have the underparts purer white than any available in Bombay.

Of two males out of a flock near Wada, Thana, Bombay, obtained on 1 December 1973, one has a 118 mm wing and the other 113 mm. The latter lacks the rufous on the forehead and has a white chin *contra* rufous in the adult. Another "off Africa" with dusky upperparts and very little bluish sheen above (wing 116) has a broad dusky collar, enclosing a small white patch on the chin. The white throat appears in juvenile (?) specimens under *gutturalis* also.

Vaurie (1951) has also dealt with the difficulty of telling these two races apart.

♂♂	Wing
<i>rustica</i> (20)	117-130 av. 123 (IH 120-129)
<i>gutturalis</i> (22)	110-116 av. 112 (IH 110-123)
<i>tytleri</i>	115-119 av. 117 (IH ♂♀ 115-124)
♀♀	
<i>rustica</i> (11)	118-126 av. 122.5 (IH 116-128)
<i>gutturalis</i> (7)	98-116 av. 109.5 (IH 108-113)
<i>tytleri</i>	114, 115, 120

917 *Hirundo rustica gutturalis* Scopoli
(Philippines) Eastern Swallow 3:241
38: 22 ♂♂ 10 ♀♀ 6 ♂
2 Bhimasar, Anjar, Kutch, 1 Kharaghoda, 1 Dabka, Baroda, 1 Nandur-Madhmeshwar, Nasik; 1 Delhi; 1 Tulsi, 1 Wada, 1 Ambernath, 1 Thana,

1 Powai, 1 Juhu, 5 Bandra, Bombay; 1 Kottayam, Vembanad Lake, Backwaters, 1 Cape Comorin, Kerala; 2 Cumbum Valley, 1 Dodipatti, Madhubani, Tirhut, Bihar; 1 Dibrugarh, Assam; 1 Port Blair, 2 Narcondam I., Andamans; 1 *Shurdaung*, 1 *Prome*, 1 *Maymyo*, 1 *Tenasserim*, *Burma*; 6 *Peking*, 1 *Tientsin*, *China*; 1 no data.

Juveniles have dull coloured heads, the chins white mixed with rufous, and the breast bands sooty, rather than black or chestnut as in the adults.

One specimen No. 8159 marked "? juvenile" collected by J. P. Cook at Maymyo, Burma, on 23 May 1913 has the white of the chin connected with that of the underparts—the dark pectoral band showing only at the sides of the breast and connected by a faint tinge.

Measurements and remarks under 916.

In December 1962, a number of swallows were netted and ringed at a roost in mangrove at Mahim, Bombay. Of 974 birds measured, 788 (81%) had their wings 105-115 mm (av. 111.3) and the remainder (186 birds = 19%) measured up to 127 mm (av. 119.1). The average weight of the smaller birds was 14.44 gm *contra* 15.2 gm in the larger.

918 *Hirundo rustica tytleri* Jerdon (Dacca) Tytler's or Chestnut-bellied Swallow 3:242
9: 6 ♂♂ 3 ♀♀
1 Bhutan Duars, 8 Goalpara, Assam.
Measurements under 916.

919 *Hirundo tahitica domicola* Jerdon (Nilgiri Hills) Nilgiri House Swallow 3:244
3: 2 ♂♂ 1 ♀
1 Runnymede, 4600', Nilgiris; 1 Mutherkutty, 1 Travancore.
Wing 103, 103, 105 (IH 99-105); bill 7.8, 8.8, 8.3; tail 43, 44, 46 (IH 44-47).

920 *Hirundo tahitica javanica* Sparrman (Java) Javan House Swallow 3:243
1 ♀ South Andamans
Wing 109 (97-107); tail 47.

The bill is broken but does appear wider than in *domicola*.

921 *Hirundo smithii filifera* Stephens (India) Indian Wiretailed Swallow 3:245

14: 7♂♂ 7♀♀

1 Bhagat State, 1 Solon 5000', 1 Kandaghat, Patiala, 1 Lahore, Punjab; 1 Dodi, Malwa Plateau, C.I.; 1 Ajwa, Baroda, 1 Walwan, Lonavla, Poona; 1 S. Konkan; 1 Karwar, Kanara; 1 Meerut, 1 Almora, 2 Darwar, Ranikhet, U.P.; 1* *Thayetmyo District, Burma.*

Measurements on p. 355

There is considerable variation in the intensity of chestnut on the head which is palest in No. 18092, a ♂ with enlarged testes obtained at Bhagat State 3500', Simla Hills on 26th June 1922, no doubt breeding. Could this be *H. s. borbinskoii* Stakhanow from Chekov, separated for its paler head?

♀ No. 8197 from South Konkan with a 132 mm wire in tail is probably wrongly sexed.

922 *Hirundo fluvicola* Blyth (Bundelkund) Indian Cliff Swallow 3:246

10: 4♂♂ (2 juv.) 3♀♀ 3o?

1 Doraha, Punjab; 2 Keoladeo, Bharatpur, Rajputana; 2 Ajwa, Baroda, 1 Dohad, Gujarat; 1 Madhmeshwar, Nasik, 1 Ambernath, Kalyan, 1 Shil, 1 Sanpada, Badlapur, Thana, Bombay.

	Wing	Bill	Tail
♂♀	89-94	6.2-6.7	37-43
	(89-94)	c. 6	40-44)

o? 8203 Shil, Thana, near Bombay (10 Dec.) has a paler head on which the central streaks are more visible.

The two from Bharatpur, a ♂ and a ♀ (11 May) appear juveniles. The spotting on the breast is not as distinct as in the adults and the heads, though darker than in 8203, lack the rufous tinge and are more heavily streaked.

923 *Hirundo daurica daurica* Linnaeus (Siberia) Daurian Striated Redrumped Swallow 3:248
nil.

The size of the wing (125-133) and the buffiness of the underparts of four topotypical specimens borrowed from the British Museum (N.H.) leave no doubt that none of the specimens now in our collection is of this race. Stuart Baker's records of its breeding at Shillong, Assam, probably refer to *H. striolata mayri*, No. 929, q.v.

924 *Hirundo daurica rufula* Temminck (Egypt) European Redrumped Swallow 3:252

4: 2♂♂ 2♀♀

3 Chitral, N.W.F.P.; 1 Hannah (Baluchistan?)

The last was collected by J. W. N. Cumming on 1st May 1909 at Hannah, which place cannot now be traced but is probably in the northwest.

All were obtained in April-May and can be distinguished from birds from further east (Simla, Garhwal, Nepal) by the white edges to the pale chestnut of the rump, the almost complete absence of streaks on the breast and the broad rufous collar round the neck. The last character is to some extent dependent on the method of preparation of the skin, but none of the others have it so distinct.

The adults are very similar to the young of *nipalensis* (q.v.) from their breeding grounds at Simla.

Ticehurst (1933, *Ibis*: 547) held that Seebohm's *scullii* was smaller (wing 111-121) than *rufula* (120-127). Earlier (1922, *Ibis*: 662) he had recorded two young near Karachi on 18 November 1919. In 'The Birds of Central India' (1939, *JBNHS* 41:103), Whistler identified a pale-rumped, finely-streaked and long-tailed specimen from Santanwara, Gwalior, as of this race but this record is omitted in subsequent literature. Vaurie (1951, *Amer. Mus. Novit.*, No. 1529:34) measured 23 ♂♂ as 117-128 (av. 121-HA) and 13 ♀♀ 116-127 (av. 119) and decided that *scullii* was synonymous with *rufula*. Though his speci-

mens ranged from Morocco to Eastern Afghanistan, he had none from Indian limits. The specimens now available measure ♂ wing 117, tail 92 (one damaged) and ♀ ♀ wing 112, 115, tail 87, 98, which certainly support Ticehurst's conclusions, and the matter requires re-examination. The Hannah bird is marked as smaller than *rufula* by the collector.

925 *Hirundo daurica nipalensis* Hodgson
(Central Nepal) Himalayan Striated Red-rumped Swallow 3:250

53: See details below.

These birds fall into three groups:-

(a) 20: 11 ♂ ♂ (4 juv. 1 fldg.) 6 ♀ ♀ (2 juv.) 3 o? (1 fldg.)

15 Simla, 6500'-7000'; 1 Koti State, 1 Fagoo, 8000', Keonthal; 1 Lohba, 1 Karnuprayag, Garhwal, U.P.; 1 Bijaypur, Nepal.

All these taken between 30th April and 7th September have their underparts finely streaked as in *erythropygia* and rumps paler than in (b). The juveniles differ from the adults in having the rump more fringed with white and the breast more sparsely streaked. In fact they are very similar to adult *rufula/scullii* and would have been so listed had not adults been obtained at the same time. This form may be only an altitudinal migrant which does not leave the Himalayan foothills. Hodgson when describing this said it was the common swallow of the central region of Nepal, and in view of the possibility of more than one form occurring in Nepal, I am restricting the type locality to Central Nepal.

Of two specimens from Nepal borrowed from U.S. National Museum, No. 391014 (4 April 1947) from Gokarna, Central Nepal, could be included in (a) while 391023 (4 Oct. 1947) from Thankot (27° 41'N., 85° 11'E.) agrees with those in (b).

(b) 29: 15 ♂ ♂ 8 ♀ ♀ 6 o?

3 Jagadhri, Ambala, Punjab; 2 Radhanpur, 1 Dhari, Amreli, 1 Cambay, 1 Dabka, Baroda, 1 Dohad, Gujarat; 3 Ghoti, Nasik, 4 Wada, 1 Bhivandi, Thana, 1 Sion, Bombay, 2 Khopoli, Kolaba, 1 Mehda, Satara, 1 Sholapur Road; 1 N. Kanara; 2 Orcha, Bastar, M.P.; 1 Orissa; 3 Meerut, U.P.

It has been customary, at least in Indian literature, to accept the form(s) visiting India in large flocks during the cold weather, as *nipalensis*, but these specimens (several of which have been recorded as *nipalensis*) appear to be different from the population resident in the Himalayas listed under (a). Though there are differences in individuals from the same flock, in series, the streaks are broader and more numerous, and the chestnut of the rump is darker and more consistently streaked. A large proportion are birds of the year, without glossy upperparts, but these again cannot be matched with the juveniles from Simla, and the statement in IND. HANDBOOK (5:69) that "the streaks are coarser in winter" does not appear to be the correct explanation. The rufous (buffy) wash on the underparts varies and cannot be linked with sex or season. In some, the chestnut on the rump is almost as dark as in *erythropygia*, but always streaked *contra* unstreaked in adult *erythropygia*. It is noteworthy that Vaurie (loc. cit. p. 40) identifies *nipalensis* only from Nepal and northern Punjab and lists all the birds from continental India as *japonica* q.v.

(c) 4: 2 ♂ ♂ 2 ♀ ♀ 3300' North Shan States, Burma.

All were obtained by J. P. Cook on 27th September 1913 and are marked *nipalensis*. In series they all show the rufous (buffy) wash on the underparts which are darker, and are more prominently streaked in the males. The females have the rumps distinctly paler, and they may both be birds of the year.

	Wing	Tail
(a) ♂♂	112-117 av. 114.3	91-102 av. 96
(b) ♂♂	113-120 av. 116.2	63-98 av. 81.6
(c) ♂♂	110,116	87,89
(a) ♀♀	111,114 (2), 115	83,88,90,91
(b) ♀♀	111-119 av. 115.4	73-95 av. 81.3
(c) ♀♀	112,115	70,77
(IH ♂♀	111-123	81-102, once 107)

	Wing	Tail
♂♂	117,120,122,126*	81,89,96,108*
(Vaurie,1951:114-125 av. 120		89-106 av. 97)
♀♀	115,119	90,95
(Vaurie,1951:117,119,122		85,95,100)

In IND. HANDBOOK (5:66) the key to subspecies requires a wing "mostly over 120" but the measurements on page 70 are "♂♀ 114-126" which incidentally, are from Vaurie 1951, and not 1959.

926 *Hirundo daurica japonica* Temminck & Schlegel (Japan). Japanese Striated or Red-rumped Swallow.

7: 4♂♂ 2♀♀ 1o?

1* Delhi; 2 Goalpara, Assam; 2 *Hlwa Chang, Thayetmyo*, 1 *Prome*, 1 2500' *Nabudaung, Sando-way District, Burma*.

♂ Specimen No. 18102* obtained by Basil Edwardes at Delhi on 16 November 1924 out of "numbers perched on telegraph wires" was first listed (*JBNHS* 31:271) as *H. d. striolata* when it was mentioned that it had been sent to Dr. Ticehurst for identification. The measurements were noted: Wing 122 mm, tail 120 mm, depth of fork 68 mm. Later on page 578 (loc. cit.), Ticehurst was quoted "This is a very coarsely marked swallow on the underparts, but there are others equally coarsely marked in the British Museum from the Himalayas. It is much too small however for *striolata* and I consider it to be *H. d. nipalensis* which varies much in striation." A re-examination reveals that the label is marked "japonica" and initialled "CBT", an identification which appears to be correct.

The two males from Goalpara, Assam, are slightly larger (wing 120, 122) than the others under *nipalensis* (b), while the others from Burma are smaller but have been named *japonica* by some earlier worker and are left unchanged. As indicated earlier, several yet listed under *nipalensis* may have to be re-classified.

927 *Hirundo daurica erythropgia* Sykes (Dukhun, Poona) Indian Striated or Red-rumped Swallow 3:251

28: 16♂♂ 8♀♀ 4o?

1 Nawashar, Jullundur, 1 3000', 1 3500', 1 Salogra 5000', Baghat State; 1 Keonthal State 7000', 1 Patiala; 1 Mubarikpur, 2 Ambala, 1 Karnal, Punjab; 1 Delhi; 1 Chanderi, 1 Kuno, Gwalior; 1 Jalor, 1 Hamavas, Pali, Jodhpur; 1 Rudramath, 1 Bhujia Fort, Kutch; 1 Ghatwad, South Kathiawar; 1 Chikalda, Berar; 1 Pandwa, Surat Dangs; 1 Jubbulpore; 1 Goregaon, Bombay; 1 Thattekad, Travancore; 1 Kodaikanal, 1 Tope, Palnis; 2 Kodura, South Cudappah; 1 Janai, Almora.

Sykes when naming *erythropgia* in 1832 said he had obtained it out of a large flock and this immediately indicates the migrant form known as *nipalensis* (or *japonica*?) and to which this name would apply! I am however continuing to use *erythropgia* for the race resident in India, leaving it for somebody else to examine this aspect further.

The underparts are very finely streaked and very similar to *rufula/scullii* in this respect. The rump is however much darker and without any streaks, a character by which it can be separated from *nipalensis*.

Sp. 8243 a ♀ obtained in Jodhpur on 19th October 1933 and marked *nipalensis*? by Whistler, has a pale, almost cream-coloured heavily-streaked rump. The underparts are more coarsely streaked than in adult *erythro-*

pygia, but the 106 mm wing and 72 mm tail suggest a juvenile of this subspecies. A similar bird from Belgaum, Karnataka (21st Oct.) in St. Xavier High School collection (wing 110, tail 68) and two fledglings handled in a nest under a bridge near Karnala Bird Sanctuary, Pen, Kolaba, Maharashtra on 14th June 1975 support this identification. Sp. No. 20437 from Goregaon near Bombay is a very poor specimen, but the pale rump and the date (21st Aug.) suggest a juvenile of this race.

	Wing	Tail
♂♂	109-117 av. 112.5	67-83 av. 75
♀♀	103-113 av. 107	70-78 av. 74
(IH ♂♀)	104-116	70-82)

Ticehurst (*JBNHS* 32:350) said that this form ascended to over 4000' and bred in the same area as *nipalensis*. This was repeated by Jones in 'Birds of the Simla and adjacent Hills' (*JBNHS* 47:431-432) but queried by the editors. This aspect certainly requires a careful re-examination in the field.

928 *Hirundo daurica hyperythra* Blyth (Ceylon) Ceylon Striated or Redrumped Swallow 3:253
nil.

929 *Hirundo striolata mayri* Hall (Singhaling, Hkamti, Upper Chindwin, Burma) Chinese Striated or Redrumped Swallow 3:249

4 o? nestlings. Shillong, Assam.

The young taken by Stuart Baker on 28th May 1908 have broad streaks on the underparts, those on the breast forming a patch. Traces of the black thigh patches are present and the rump is pale and streaked.

Vaurie (1951, *Amer. Mus. Novit.*, 1529:31) refers to an adult *substriolata* (= *mayri*) caught on the nest at Shillong on 15th May and a juvenile, barely out of the nest on 22nd June.

EL *Hirundo striolata stanfordi* (Mayr) (Tama, 1000 ft, Myitkyina District, Upper Burma) Burmese Striated or Redrumped Swallow

1 ♂ *Galsunk* (?), 2000', South Shan States, Burma.

Wing 133; central tail 49, outermost 100, fork 51.

The bird collected on 10 August 1913 is marked as breeding. No adults of *H. striolata mayri* are available but the underparts are more heavily streaked than in *H. d. japonica* (926) and the rump is also darker and more distinctly streaked.

930 *Delichon urbica urbica* (Linnaeus) (Sweden) European House Martin 3:226
9:3 ♂♂ 5 ♀♀ 1 o?

1 *Haftquill*, Persian Gulf; 3 Koti State, 1 Tara Devi 7000', Patiala, NW. Himalayas; 1 Khorchar, 11000', Ladak; 3 Songadh Fort, Navsari, Gujarat.

Measurements on p. 355

931 *Delichon urbica cashmeriensis* (Gould) (Kashmir) Kashmir House Martin 3:228
5: 1 ♂ 4 ♀♀

2 Chitral Drosh, 15000', 1 Chitral, N.W.F.P.; 1 Dachigam, 1 Kashmir.

These cannot be separated from nominate *urbica* by the smoky grey or greyish white of the lower plumage (IND. HAND. 5:73) but the measurements (under 930, p. 355) of the wing, tail and fork in tail are almost exclusive. Though not apparent from the measurements, the bills are also smaller than in *urbica* (excluding one specimen from *Haftquill*) and *lagopoda*.

EL *Delichon urbica lagopoda* (Pallas) (Dauria)

1 ♀ *Taunggyi*, S. Shan States, Burma.

Wing 111; bill 7.3; tail 49, fork 6.

The specimen is marked *whiteleyi* which is now synonymised with *lagopoda*. The area of white on the rump appears larger than in the others.

932 *Delichon nipalensis nipalensis* Moore
(Nepal) Nepal House Martin 2: 230
6: 3♂♂ 2♀♀ 1♂?
2 Ranibagh, Kumaon, U.P.; 1 Kewzing, W. Sikkim, 2 Sikkim; 1 Dening, Lohit Valley, NE. Assam.

	Wing	Bill	Tail
♂♂	91-100 av. 96	5.5-6.6 (6.1)	35-40 (38.5)
(IH ♀♀)	90-98	from skull 7.9	37-41)

Three unregistered birds from Central and Western Bhutan with wings 97, 98, 98 are in-

cluded in the measurements and the largest (100) is from NE. Assam, showing an increase in size eastwards towards *cuttingi* (type Gangfang, 5500', near Burma-Yunnan Border). The black is restricted to the chin and can hardly be said to occur on the throat except for a large greyish brown patch in the easternmost specimen. All have black patches on the sides of the breast which do not meet across the breast to form a band.

MEASUREMENTS

912 *Riparia paludicola chinensis* (J. E. Gray)

	Wing	Bill	Tarsus	Tail
♂♂	85-96 av. 91.6	5.4-6.8 av. 6.1	c.10-11	36-42 av. 39.7
♀♀	85-95 av. 91	5.5-6.6 av. 6.1	c. 11	36-42 av. 38.8
(IH ♂♂ ♀♀)	90-96	from skull c.8	10-11	37-45)

913 *Hirundo rupestris rupestris* Scopoli

	Wing	Bill	Tarsus	Tail
♂♂	127-133 av. 129.8	8-9 av. 8.7	11-12	30-55 av. 52.8
♀♀	130,130,133	7.9,8,8.9	11-12	53,54,55
(IH ♂♂ ♀♀)	127-134	from skull 11-12	11-12	53-57)

914 *Hirundo concolor concolor* Sykes

	Wing	Bill	Tarsus	Tail
♂♂	105-112 av. 109.4	7.8-3 av. 7.4	10-11	42-45 av. 43.5
♀♀	107,108,112	7.6,8,8	10	43,44,45
(IH ♂♂ ♀♀)	105-113	from skull 9-11	9-10	42-46)

921 *Hirundo smithii filifera* Stephens

	Wing	Bill	Central	Tail
♂♂	108*,115-126 av. 120.7	6.5-8.5	35-39	Outer 86-178
(IH 113-122		from skull 11-12		109-173)
♀♀	114-117 av. 116	7.5-8.7	35-38	49-72 one 132
(IH 108-116		from skull 11-12		51-71)

930 *Delichon urbica urbica* (Linnaeus)

	Wing	Bill	Tail	Fork
Nominate <i>urbica</i> ♂♀	107-115 av. 111.2	6.5-7.6	54-59 (56.8)	13-18 (16)
<i>cashmiriensis</i> ♂♀	97-108 av. 101.8	6.2-7	47-48 (47.8)	7-11 (8.4)

(to be continued)